

Climate Action and Renewables





By Vuyo Ntoi, Co-Managing Director, African Infrastructure **Investment Managers (AIIM)**

Energy is not only at the centre of the global climate challenge, but also has a large part to play in the solution.

he UN states that fossil fuels account for over 75% of global greenhouse gas emissions - though Africa's contribution is a small fraction of this total - and that reaching global net zero requires a rapid, universal transition to renewable, clean energy. In 2015 at COP21 in Paris, the world committed to keeping global temperatures within 1.5°C of preindustrial levels, requiring many industrialised nations across the globe to cut emissions in half by 2030 and to achieve net zero by 2050.

Now, with all eyes turned to the first COP in Africa (COP27 in Sharm El Sheikh) in over half a decade - the continent already most impacted by climate change - is this a final opportunity to achieve a global commitment to renewable energy as central to the energy mix?



The role of Africa's Independent **Power Producers (IPPs)**

Renewable energy is now profitable on a standalone basis and more affordable to consume than fossil fuels. Africa has tremendous renewable energy potential: its geography is well suited not only to solar and wind but also waste, geothermal and water-based energy creation. African Infrastructure Investment Managers (AIIM's) investment portfolio includes over 30 largescale renewables facilities with a total installed capacity of 2.32 gigawatts (GW).

In 2020, AllM-managed facilities created enough renewable energy to supply over one million middle-income homes with clean energy. This not only generates cleaner, sustainable energy for future generations, but will also help stimulate economic development and job creation in construction, operations, logistics, and maintenance across the continent. It is time to accelerate private and public investment into more renewable energy infrastructure for Africa.

The emergence of IPPs as an accelerator of renewable energy generation is a key step in Africa's energy transition. IPPs have often been the first to embrace new technologies, taking risks away from the public sector and creating opportunities to share technical knowledge.

IPPs are also typically funded by international investors and development finance institutions

(DFIs) which uphold strict international environmental, social, and corporate governance (ESG) standards, and these best practices spill over to local businesses and job markets throughout Africa.

While IPP power is, in some corners, considered more costly than publicly generated power, this is only relevant to power consumers who can choose between the two. In supply-constrained

Entities such as the Islamic Corporation for the Insurance of Investment and Export Credit (ICIEC) and the Islamic Development Bank (IsDB) group are well positioned to become conduits for this overseas funding. The ICIEC and IsDB already play a critical role in helping to mitigate some of the risks associated with investing in key countries on the continent through products such as political risk insurance, and this is assisting in the mobilisation of this required capital.

markets such as South Africa, one is not an alternative to the other.

Cheap grid electricity is typically a function of utilities charging for electricity at historic costs, which has proven unsustainable as the utilities can then not afford the capital expenditure required to maintain and increase grid generation capacity. In fact, renewable energy is now the cheapest form of new electricity generation available.

To free up the balance sheets of local government-owned electricity utilities and take on the task of providing the necessary capital to build generating facilities, IPP facilities must operate as efficiently as possible to be viable, driven by the dual pressures of providing adequate returns to investors and being a successful bidder in a competitive bidding

Investment by IPPs alone does not guarantee the optimal mix of energy sources - Africa's governments also have an essential role to play. IPPs respond to incentives, especially those reflected in government-set feed-in tariffs and those embedded in competitive bidding processes.

Recently, in Kenya, private sector leaders have suggested that the current feed-in tariffs favour investment in thermal power but not geothermal power, despite geothermal being a highly reliable renewable energy source, with almost zero carbon emissions and low operating costs.



Experts have therefore recommended the feed-in tariff for geothermal be increased to accelerate development by IPPs and rapidly boost the growth of geothermal power sources. And while this would be a cost to consumers in the shorter term, feedstock savings could compensate for the increased cost in future as the sector develops.

Governments must also consider how the power sector is regulated. IPPs can only sustainably operate in a market with low credit risk, where suppliers know they will receive payment for services rendered. Power markets work best when regulated independently to ensure cost reflectivity in utility tariffs, leading to a more sustainable market in the long run and creating conditions for additional international investment.

The International Investor **Opportunity**

Africa's infrastructure funding backlog is extensive and there is an insufficient stock of private capital on the continent to meet investment demands. It is estimated that US\$100bn in spending is required annually to fill the funding backlog, excluding clean energy transition costs.

Yet the total asset balances of pension funds and sovereign wealth funds in sub-Saharan Africa measures less than US\$500bn. A major mobilisation exercise is therefore required to attract overseas capital if the continent is to meet its infrastructure requirements and transition to cleaner energy.

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The IsDB, which is able to tap international capital markets, offers financial and technical support to private companies and governments and is a key player in helping the continent to overcome the challenges of climate change through adaptation-driven and resilience-focused investments and interventions

Accelerating Africa's Renewable Energy Transition

Historically, renewable energy development in Africa has often been ad hoc due to low levels of macro energy planning. This has created a high-risk environment for developers, as projects are implemented and negotiated on a bilateral basis and there is great uncertainty as to whether projects will reach financial close. More predictable and scalable procurement processes are required in more countries on the continent to accelerate the participation of developers in the provision of much needed generation capacity. Countries such as South Africa, Egypt, Morocco, Kenya and Uganda have shown the way.

The lack of sufficiently large national grids is another considerable constraint to scaling up renewable energy across Africa. While AIIM has invested substantially in off-grid renewable power solutions, including in BBOXX, an

energy platform that provides renewable power to off-grid customers in Rwanda, Kenya, and DRC, these initiatives cannot replace the grid entirely.

Regionalisation is a potential solution for increasing grid size and complexity, allowing for a more scaled and planned incorporation of renewable energy generation to the grids. Ultimately, sufficiently robust grids are needed to mitigate the intermittency of some renewable energy sources.

Sustainable utilities are also a requirement for increased renewable energy investment. Unfortunately, COVID-19 has compounded the financial pressures on national utilities and weakened national governments' ability to support them. In turn, those pressures have been further affected by higher oil and gas

Large commercial customers must be able to procure renewable power directly in countries where financial pressures on government spending mean that public utilities cannot meet the demand for clean energy, and it is IPP solutions that hold the key for commercial and industrial users. AllM, through its Starlight Energy investment in Nigeria, was an early investor in clean commercial and industrial power solutions.

Action to Replace Words at COP27

AllM's wish list for COP27 is not an extensive one, but it is clear-eyed and informed by our experience as Africa's largest infrastructure investor. One of the main ambitions for this year's COP must be for tangible action to match the words echoed about renewable energy investment in previous years.

The deadlines agreed in Paris in 2015 are fast approaching, and now is the time for urgent delivery. Seven of the 10 countries most affected by climate change are in Africa. Urgent action and critical investment are needed.

With all eyes on COP27, the annual capital flows pledged by developed countries to assist the developing world to build resilience and reduce emissions must be realised.

Note: AIIM is a subsidiary of Old Mutual Alternative Investments (OMAI), a member of the global Old Mutual Group of South Africa. In 21 years, AllM has built a US\$2bn plus investment portfolio across south, west and east Africa in IPPs in renewable and clean energy projects, transport, logistics and digitisation. Oxford-educated Mr Ntoi is an expert on private equity investment and infrastructure.

